

Amendments to the Specification

Please replace the paragraph beginning at page 5, line 7, with the following rewritten paragraph:

A safety stock amount calculation method according to the present invention that calculates a safety stock amount SS based on a demand standard deviation σ for a certain commodity, an inventory adjustment period N calculated from a lead time L of the commodity or its components and a safety coefficient k that denotes the level of a ratio of service S for demand, is characterized by comprising the steps of: calculating a probability Pb that a delivery time for the commodity required by a customer is shorter than the lead time L; ~~calculating a representative value LL of the difference between the lead time L and the customer's required delivery time in the case where the lead time L has exceeded the customer's required delivery time; correcting the inventory adjustment period N using the representative value LL; calculating any of an average value, median, mode, experimental value of the difference between the lead time L and the customer's required delivery time, and a value obtained by subtracting the minimum value of the customer's required delivery time from the maximum value of the lead time L as a representative value LL of the difference between the lead time L and the customer's required delivery time in the case where the lead time L has exceeded the customer's required delivery time; correcting the inventory adjustment period N to the representative value LL or the value obtained by adding an ordering cycle M for the commodity to the representative value LL; and calculating the safety stock amount SS based on the standard deviation σ , corrected inventory adjustment period N, probability Pb and safety coefficient k.~~

Please replace the paragraph beginning at page 6, line 14, with the following rewritten paragraph:

A safety stock amount calculation method according to the present invention that calculates a safety stock amount SS based on a demand deviation σ for a certain commodity, an inventory adjustment period N calculated from a lead time L of the commodity or its components and a safety coefficient k that denotes the level of a ratio of service S for demand, is

characterized by comprising the steps of: calculating the standard deviation σ based on demand data for the commodity to be obtained in the case where the lead time L has exceeded a customer's required delivery time; ~~calculating a representative value LL of the difference between the lead time L and the customer's required delivery time in the case where the lead time L has exceeded the customer's required delivery time; correcting the inventory adjustment period N using the representative value LL ; calculating any of an average value, median, mode,~~ experimental value of the difference between the lead time L and the customer's required delivery time, and a value obtained by subtracting the minimum value of the customer's required delivery time from the maximum value of the lead time L as a representative value LL of the difference between the lead time L and the customer's required delivery time in the case where the lead time L has exceeded the customer's required delivery time; correcting the inventory adjustment period N to the representative value LL or the value obtained by adding an ordering cycle M for the commodity to the representative value LL ; and calculating the safety stock amount SS based on the standard deviation σ , corrected inventory adjustment period N , and safety coefficient k .

Please replace the paragraph beginning at page 7, line 21, with the following rewritten paragraph:

A safety stock amount calculation device according to the present invention that calculates a safety stock amount SS based on a past demand deviation σ for a certain commodity, an inventory adjustment period N calculated from a lead time L of the commodity or its components and a safety coefficient k that denotes the level of a ratio of service S for demand, is characterized by comprising: a short delivery time ratio calculation section that calculates a probability P_b that a delivery time for the commodity required by a customer is shorter than the lead time L ; ~~an average number of days exceeding delivery time calculation section that calculates a representative value LL of the difference between the lead time L and the customer's required delivery time in the case where the lead time L has exceeded the customer's required delivery time; an inventory adjustment period correction section that corrects the inventory adjustment period N using the representative value LL ; an average number of days exceeding~~

delivery time calculation section that calculates any of an average value, median, mode, experimental value of the difference between the lead time L and the customer's required delivery time, and a value obtained by subtracting the minimum value of the customer's required delivery time from the maximum value of the lead time L as a representative value LL of the difference between the lead time L and the customer's required delivery time in the case where the lead time L has exceeded the customer's required delivery time; an inventory adjustment period correction section that corrects the inventory adjustment period N to the representative value LL or the value obtained by adding an ordering cycle M for the commodity to the representative value LL; and a safety stock amount calculation section that calculates the safety stock amount SS based on the standard deviation σ , corrected inventory adjustment period N, short delivery time ratio Pb and safety coefficient k.

Please replace the paragraph beginning at page 9, line 1, with the following rewritten paragraph:

A safety stock amount calculation device according to the present invention that calculates a safety stock amount SS based on a past demand deviation σ for a certain commodity, an inventory adjustment period N calculated from a lead time L of the commodity or its components and a safety coefficient k that denotes the level of a ratio of service S for demand, is characterized by comprising: a demand standard deviation calculation section that calculates the standard deviation σ based on demand data for the commodity to be obtained in the case where the lead time L has exceeded a customer's required delivery time; ~~an average number of days exceeding delivery time calculation section that calculates a representative value LL of the difference between the lead time L and the customer's required delivery time in the case where the lead time L has exceeded the customer's required delivery time; an inventory adjustment period correction section that corrects the inventory adjustment period N using the representative value LL;~~ an average number of days exceeding delivery time calculation section that calculates any of an average value, median, mode, experimental value of the difference between the lead time L and the customer's required delivery time, and a value obtained by subtracting the

minimum value of the customer's required delivery time from the maximum value of the lead time L as a representative value LL of the difference between the lead time L and the customer's required delivery time in the case where the lead time L has exceeded the customer's required delivery time; an inventory adjustment period correction section that corrects the inventory adjustment period N to the representative value LL or the value obtained by adding an ordering cycle M for the commodity to the representative value LL; and a safety stock amount calculation section that calculates the safety stock amount SS based on the standard deviation σ , corrected inventory adjustment period N, and safety coefficient k.

Please replace the paragraph beginning at page 10, line 10, with the following rewritten paragraph:

A safety stock amount calculation program according to the present invention allows, in order to calculate a safety stock amount SS, a computer to function as: a means for calculating a commodity demand standard deviation σ related to demand for a certain commodity; a means for calculating a probability P_b that a delivery time for the commodity required by a customer is shorter than the lead time L of the commodity or its components; ~~a means for calculating a representative value LL of the difference between the lead time L and the customer's required delivery time in the case where the lead time L has exceeded the customer's required delivery time;~~ a means for calculating an inventory adjustment period N using the representative value LL; ~~a means for calculating any of an average value, median, mode, experimental value of the difference between the lead time L and the customer's required delivery time, and a value obtained by subtracting the minimum value of the customer's required delivery time from the maximum value of the lead time L as a representative value LL of the difference between the lead time L and the customer's required delivery time in the case where the lead time L has exceeded the customer's required delivery time;~~ a means for correcting an inventory adjustment period N to the representative value LL or the value obtained by adding an ordering cycle M for the commodity to the representative value LL; and a means for calculating the safety stock

amount SS based on the standard deviation σ , corrected inventory adjustment period N, probability Pb and a safety coefficient k that denotes the level of a ratio of service S for demand.

Please replace the paragraph beginning at page 10, line 27, with the following rewritten paragraph:

A safety stock amount calculation program according to the present invention allows, in order to calculate a safety stock amount SS, a computer to function as: a means for calculating a commodity demand deviation σ related to demand for a certain commodity based on data to be obtained in the case where the lead time L of the commodity or its components has exceeded the customer's required delivery time; ~~a means for calculating a representative value LL of the difference between the lead time L and the customer's required delivery time in the case where the lead time L has exceeded a customer's required delivery time;~~ a means for calculating an inventory adjustment period N using the representative value LL; a means for calculating any of an average value, median, mode, experimental value of the difference between the lead time L and the customer's required delivery time, and a value obtained by subtracting the minimum value of the customer's required delivery time from the maximum value of the lead time L as a representative value LL of the difference between the lead time L and the customer's required delivery time in the case where the lead time L has exceeded the customer's required delivery time; a means for correcting an inventory adjustment period N to the representative value LL or the value obtained by adding an ordering cycle M for the commodity to the representative value LL; and a means for calculating the safety stock amount SS based on the standard deviation σ , corrected inventory adjustment period N, and a safety coefficient k that denotes the level of a ratio of service S for demand.

Please replace the paragraph beginning at page 18, line 29, with the following rewritten paragraph:

A reorder point calculation method according to the present invention is characterized by comprising calculating a reorder point Q_{RO} based on a safety stock amount ss calculated by the

aforementioned safety stock amount calculation method, ~~a representative value DA of a demand per unit of period, a representative value DA from which elected any of an average value, median, mode and experimental value of a demand per unit of period,~~ and a marginal lead time L_M that denotes a minimum value of the effective lead time to be obtained after the cumulative value of the appearance probability of the effective lead time T_i has exceeded the ratio of service S . In this case, the reorder point Q_{RO} may be calculated by further using a demand frequency F_D that denotes an appearance probability of the period during which demand per unit of period is not 0 in addition to the safety stock amount ss , representative value DA of a demand, and marginal lead time L_M .

Please replace the paragraph beginning at page 19, line 14, with the following rewritten paragraph:

Another reorder point calculation device according to the present invention is characterized by comprising: a delivery time appearance probability calculation section that calculates an appearance probability of a certain delivery time for each delivery time based on the delivery time for a certain commodity required by a customer and its frequency; a lead time appearance probability calculation section that calculates an appearance probability of a lead time of the commodity or its components; an effective lead time calculation section that calculates, based on the customer's required delivery time and lead time, an effective lead time T_i that denotes the period between the time when it has been predicted that the commodity stock will fall below a corresponding reorder point and the time when the commodity has become available after the commodity had been ordered based on the prediction that the commodity stock would fall below a corresponding reorder point; an effective lead time appearance probability calculation section that calculates an appearance probability of the effective lead time T_i for each lead time T_i based on the appearance probability of the customer's required delivery time and the appearance probability of the lead time; a safety stock amount calculation section that calculates a safety stock amount ss based on a demand standard deviation σ_D for the commodity per unit of period, a safety coefficient k that denotes the level of a ratio of service S for demand, the

effective lead time T_i and the appearance probability of the effective lead time; and a reorder point calculation section that calculates a reorder point Q_{RO} based on the safety stock amount ss , ~~a representative value DA of a demand per unit of period~~, a representative value DA from which elected any of an average value, median, mode and experimental value of a demand per unit of period, and a marginal lead time L_M that denotes a minimum value of the effective lead time to be obtained after the cumulative value of the appearance probability of the effective lead time T_i has exceeded the ratio of service S .

Please replace the paragraph beginning at page 20, line 19, with the following rewritten paragraph:

Another reorder point calculation device according to the present invention is characterized by comprising: a probability distribution of customer's required delivery time calculation section that calculates an appearance probability of a certain delivery time for each delivery time based on the delivery time for a certain commodity required by a customer and its frequency to create a probability distribution g_j of the customer's required delivery time; a lead time probability distribution calculation section that calculates an appearance probability of a lead time of the commodity or its components to create a probability distribution h_k of the lead time; an effective lead time calculation section that calculates, based on the customer's required delivery time and lead time, an effective lead time T_i that denotes the period between the time when it has been predicted that the commodity stock will fall below a corresponding reorder point and the time when the commodity has become available after the commodity had been ordered based on the prediction that the commodity stock would fall below a corresponding reorder point; an effective lead time probability distribution calculation section that calculates an appearance probability of the effective lead time T_i for each lead time T_i based on the probability distribution g_j of the customer's required delivery time and the probability distribution h_k of the lead time to create a probability distribution f_i of the effective lead time; a safety stock amount calculation section that calculates a safety stock amount ss based on a demand standard deviation σ_D for a certain commodity per unit of period, a safety coefficient k that denotes the level of a

ratio of service S for demand, the effective lead time T_i and the probability distribution f_i of the effective lead time; and a reorder point calculation section that calculates a reorder point Q_{RO} based on the safety stock amount ss , ~~a representative value DA of a demand per unit of period,~~ a representative value DA from which elected any of an average value, median, mode and experimental value of a demand per unit of period, and a marginal lead time L_M that denotes a minimum value of the effective lead time to be obtained after the cumulative value of the appearance probability of the effective lead time T_i has exceeded the ratio of service S .